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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/936,317 | 11/06/2001 | Kazuyuki Miyazawa | SHI-017-USA-PCT | 4088 |
| 27955 7590 01/23/2007 TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402 | | | EXAMINER EBRAHIM, NABILA G | |
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| | | | 1618 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 01/23/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|-------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 09/936,317 | Applicant(s) MIYAZAWA, KAZUYUK | |
| | Examiner Nabila G. Ebrahim | Art Unit 1618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 18-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4/27/06</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The receipts of Information Disclosure Statement dated 4/27/06 and Applicant remarks dated 3/27/06 are acknowledged.

Status of Claims:

Claims 1-20 are pending in the application.

Claims 18-20 are new.

Claims 1, 3, 4, 7-10, 12, 15, and 17 are amended.

Rejections:

In view of the arguments of the Applicant dated 3/27/06 the rejection of the claims under U.S.C §103 is withdrawn.

Election/Restrictions

1. Newly submitted claims 18-20 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims recite a method for increasing viscosity of a composition which will require a different search.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-20 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite "allowing the resultant mixture to stand until the temperature of the mixture becomes lower than gelation temperature", the claims do not recite raising the temperature or heating the mixture to allow it to stand until the temperatures become lower. A correction or explanation is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, rejected under 35 U.S.C. 102(b) as being anticipated by Okura et al. U.S. US 5360624 (hereinafter Okura).

Okura teaches emulsion-type food in which a part or all of the fat components are substituted by a pulverized curdlan gel. The preparation of the emulsion food is done by gelation and pulverization of the curdlan gel are not significantly disturbed, other raw materials of food can be added before the above gelation or pulverization step as agar, carrageenan, salt of alginic acid, and xanthan gum (col. 3, lines 45+). The particle size after pulverizing is average size of not larger than about 100 microns (col. 3, lines 13+). Note that Okura defines "thermo-reversible gel" used herein means a gel

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which changes its state in such a manner that it melts at 50.degree. to 80° C and gels at 40° C. or lower and this change of state occurs reversibly. The thermo-reversible gel is prepared, for example, according to one of the following methods:

- a. Water is added to curdlan powder, followed by homogenizing with a high speed mixer such as a homogenizer, or a cutter mixer to obtain a uniform suspension. The suspension is heated to about 55 ° C to 80° C, preferably about 60.degree. to 750.degree. C. and then cooled to below 40.degree. C.;
- b. Curdlan powder is mixed with hot water at about 55.degree. to 80.degree. C., preferably about 60.degree. to 75° C, and dispersed, followed by cooling to below about 40° C. The disclosure reads on the amendment in the claims, which recites "allowing the resultant mixture to stand until the temperature of the mixture becomes lower than gelation temperature".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okura et al. U.S. US 5360624 in view of Hayashi Tadanobu JP4279509 (abstract) (hereinafter Hayashi) and further in view of Murata et al. US Publication 20020006414 (hereinafter Murata).

Okura has been discussed above.

Okura is deficient in the sense that he did not disclose the viscosity recited in the instant claims.

Hyashi teaches obtaining an O/W-type emulsion cosmetic having a specific viscosity and excellent spreadability on the skin and aging stability by compounding specific amounts of xanthan gum and/or locust bean gum and iota-carrageenan. The O/W-type emulsion cosmetic has a static viscosity of 5,000-35,000cp at 25° C and contains (A) 0.2-1.5wt.% (especially 0.3-0.8wt.%) of xanthan gum (a gum having a molecular weight of $\geq 1,000,000$ and a structure obtained by bonding two mols of D-mannose and one mol of Na, K or Ca salt of D-glucuronic acid to the side chain of a main chain composed of 1,4-bonded beta-D-glycol, e.g. keltrol) and/or locust bean gum (a neutral polysaccharide composed of galactose and mannose and produced by purifying and pulverizing the albumen of the fruit stone of carob tree, e.g. neosoft L) and (B) 0.2-1.0wt.% (especially 0.4-0.8wt.%) of iota-carrageenan. The cosmetic has new characteristics to exhibit elasticity and semifluidity in stationary state.

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It would have been obvious to one of ordinary skills in the art to adjust the viscosity in the method disclosed by Okura because Hayashi teaches that the composition disclosed has new characteristics to exhibit elasticity and semifluidity in stationary state.

The two references do not teach delivering an active agent in the microgel.

Murata teaches an external composition for a skin cosmetic that can be a whitening agent [0023], an anti-inflammatory agent can be added [0074] or Vitamin E [0085]. The composition comprises carrageenan, alginate [0085], agar [see table 1] and polyacrylate [0082].

Since Murata used similar ingredients such as carrageenan, and polyacrylate, it would have been obvious to one of ordinary skills in the art at the time the invention was made to add an active agent as a vitamin, anti-inflammatory, or whitening agent to the particles made by Okura and adjust the viscosity according to Hayashi. The skilled artisan would be motivated by expanding the use of the prepared particles for food consuming disclosed by Okura. The expected result would be a microgel that is produced by dissolving a hydrophilic gelling agent in water, allowing it to gel and then pulverizing. Into a specific particle size.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/501462 ('462).

The claims of '462 recites the same steps and ingredients required in instant claims 1, 3-5 which are adding a hydrophilic compound having a gelation ability in an aqueous solvent, cooling and pulverizing to obtain a microgel having a mean particle size of 0.1-1000 micrometers. Accordingly, the claims of the two applications are overlapping.

This is a provisional obviousness-type double patenting rejection.

Correspondence

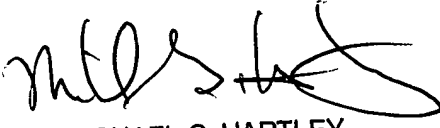
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabila G. Ebrahim whose telephone number is 571-272-8151. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabila Ebrahim
1/8/07



MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER